REMARKS

The examiner withdrew the objection to the abstract and the rejection to claim 16 under 35 U.S.C, 112, second paragraph.

The examiner maintained the rejection of claims 1-4, 7-15 and 17-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Hasunuma et al. (Development of Teleportation Master System with a Kinesthetic Sensation of Presence, 1999).

The examiner withdrew the rejection of claims 5 and 16 under 35 U.S.C. 103(a) as being unpatentable over Hasunuma et al.

35 U.S.C § 102

Claims 1-4, 7-15 and 17-20 stand rejected under 35 U.S.C. 102(b) as being anticipated by Hasunuma et al. The examiner stated:

> **As per claims 1 and 13, Hasunuma et a l , teaches a teleportation system and an associated method having a virtual reality encounter system comprising (see figs. 1 and 2), motion sensors positioned on a human user (see figs. 1 and 2, wherein operator being taken as human user), the motion sensors sending motion signals corresponding to movements of the user as detected by the motion sensors relative to a reference point the motion signals over a communications network (see figs, 1 and 2); and a humanoid robot (see figs. 1 and 2), receiving, from the communications network (see figs. 1 and 2), the motion signals to induce movement of the robot according to movement of the human user (see figs. 1 and 2); with respect to claim 13, sending motion signals from motion sensors positioned on a human user (see figs. 1 and 2), the motion signals corresponding to movements of the human user (see section 1, first paragraph, wherein human user being considered as operator, as noted above) as detected by the motion sensors relative to a reference point (see figs. 1 and 2). Note: The entire concept of this application has been embedded into Hasunuma's et al. publication. See entire publication.**

Claim 1 is directed to a virtual reality encounter system. Claim 1 includes the features of motion sensors positioned on a human user, the motion sensors sending motion signals corresponding to movements of the user as detected by the motion sensors relative to a reference point the motion signals being sent over a communications network. The examiner argues that: **Hasunuma et al. teaches a teleportation system and an associated method having a virtual reality encounter system comprising (see figs. 1 and 2), motion sensors positioned on a human user (see figs. 1 and 2, wherein operator being taken as human user),"** Applicant disagrees.

As understood, Hasunuma discloses a system with right and left master arm with two gripping operation devices used to control the robot and the system transmits realistic kinesynethic sensations to a user through the master arms. Hasunuma describes:

> **Figure 2 shows the system configuration. It consists of an audio-visual display system and a teleoperation master system; the audio-visual display system includes nine display screens, a head mount display (HMD) with a head tracker, and a 3D sound system, and the teleoperation master system includes right and left master-arm with two gripping operation devices, a motion-base, and a 3D mouse. The teleoperation master system is used to provide an operator with kinesthetic sensation as for robot's acting force and moment and upper body's motion, while the audio-visual display system is used to provide with realistic information as for robot's surrounding views and sounds.**
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> ***
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> **When traveling, an operator sends a command by using a display screen with the 3D mouse as a command input device; surrounding scenery from the robot is displayed on the other screens with some auxiliary information, and kinesthetic sensation is displayed by moving the motion base. 'When working on a dexterous task with arms, an operator manipulates by using master-arms and gripping operation devices, watching views on the HMD from robot eye cameras; kinesthetic sensation of inclination of robot upper body is displayed with the motion-base, and force and torque at wrists of robot and gripping force can be fed back to the operator through the master-aims and the gripping operation devices.**

Thus, the Hasunuma arrangement fails to suggest the feature of: "motion sensors positioned on a human user, the motion sensors sending motion signals corresponding to movements of the user as detected by the motion sensors relative to a reference point the motion signals being sent over a communications network.", because it appears that Hasunuma merely discloses the master arms and not motion sensors positioned on the user to control the movements of the robot.

Claim 4 further distinguishes over Hasunuma et al., since the reference neither describes nor suggests ... a microphone coupled to the body of the robot ... and a transducer disposed in a headset worn by the user ... .

Hasunuma teaches an audio video system, but makes no mention of a microphone.

Claims 2-3 and 6-12 are allowable at least for the reasons discussed in claim 1.

Claim 13 includes the features of sending motion signals from motion sensors positioned on a human user, the motion signals corresponding to movements of the human user as detected by the motion sensors relative to a reference point, the motion signals being transmitted over a communications network, receiving video signals from a camera via the communications

network, with receiving using a set of goggles worn by the user, the goggles including a display to render the received video signals from the camera, receiving, at a humanoid robot, the motion signals ... sending video signals received from the camera positioned on the humanoid robot to the goggles, via the communication network ... .

Claim 13 is allowable at least for the reasons discussed in claim 1. Claims 14, 15 and 17-20 are allowable for the reason that these claims depend from claim 13.

35 U.S.C §103

The examiner rejected claims 5 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hasunuma et al.

The examiner stated:

> **As per claim 5, Hasunuma et al., teaches essential features of the invention substantially as claimed with the exception of a second humanoid robot in the second location, and a second set of goggles to receive the video signals; and with respect to claim 16, a second mannequin. However, it would have been obvious to modify Hasunuma et al. teachings by using more than one robot/mannequin, that would require more than one goggle to receive video signals or any signals, because modification would have been a desire feature into Hasunuma et al. teachings in order to improve the usability and the funcfionability of system as a whole.**

Claim 5 is neither described nor suggested by Hasunuma et al. Claim 5 is directed to a virtual encounter with two users and robots. Specifically, claim 5 limits the system of claim 4 by specifying the robot of claim 4 is at a first location and the set of goggles of claim 4 is at a second location. Claim 5 adds the feature of: "... a second humanoid robot in the second location, the second humanoid robot having a second microphone and a second camera for sending audio and video signals over the communication network ... a second set of goggles worn by a second user at the first location to receive the video signals from the first camera ... and a second earphone worn by the second user ... to receive the audio signals from the first microphone... .

The examiner acknowledges that Hasunuma et al. do not teach the second humanoid robot and second set of goggles. Nevertheless, the examiner argues that: "**it would have been obvious to modify Hasunuma et al. teachings by using more than one robot/mannequin, that would require more than one goggle**

to receive video signals or any signals, because modification would have been a desire feature into Hasunuma et al. teachings in order to improve the usability and the funcfionability of system as a whole." Applicant disagrees.

Hasunuma et al. is directed to a virtual robot platform for cockpit systems. In particular, Hasunuma et al. describes that:

> The platform consists of a virtual robot platform, three actual humanoid robots, and three telexistence control cockpit systems to operate each humanoid robot. A set of a humanoid robot and a telexistence control cockpit system can form an advanced remote control humanoid robot platform; an image of the platform is shown in Figure 1.

Thus, clearly Hasunuma et al. contemplates more than one robot. However, what is neither described nor suggested by Hasunuma et al. is that the robot (of claims 4 and 1) is at a first location and the set of goggles (of claims 4 and 1) is at a second location and the system includes a second humanoid robot in the second location ... and a second set of goggles worn by a second user at the first location ... and a second earphone worn by the second user at the first location ... .

Hasunuma et al. does not suggest two locations with a robot and user in each of those locations. Hasunuma would provide the users in one location and the robots in different locations. No mention is made of a user/robot pairing. Because, Hasunuma is not directed to a virtual encounter in which the robots are proxies for the humans it would not be apparent why one would Hasunuma to modify to provide two users at two different locations controlling two robots at the two different locations. Such a modification only results from an improper application of hindsight using applicant's invention as a guide.

Accordingly, claim 5 is allowable over Hasunuma et al.

In Response to Applicant's prior arguments, the examiner stated with respect to claim 5 that:

> As to the reference not teaching "a second humanoid robot and a second set of goggles" Examiner maintain his position by stating: it would have been obvious to modify Hasunuma et al. teachings by using more than one robot/mannequin, that would require more than one goggle to receive video signals or any signals, because modification would have been a desire feature into Hasunuma et al. teachings in order to improve the usability and the funcfionability of system as a whole, as seen above.

Applicant points out that Hasunuma already discloses two robots, but does not disclose two robots in two different locations, controlled by two users each respectively in one of the two different locations. Accordingly the suggestion to modify is not present.

Claim 16 is allowable over Hasunuma et al. for analogous reasons as those given for claim 5.

Applicant has enclosed an Information Disclosure Statement.

No fee is due. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: 10/3/07

Denis G. Maloney
Reg. No. 29,670

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110
Telephone: (617) 542-5070
Facsimile: (617) 542-8906

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